

BIBLIOGRAPHICAL RECORD OF CONTENTS OF VOLUME FOUR OF PSYCHE.

Academy of natural sciences of Philadelphia. (*Psyche*, Mch.-Apr. 1883, v. 4, p. 32, 17 cm.)

Abstract of entomological communications made at meetings of Académie, etc., from 8 Aug. 1882 to 23 Jan. 1883; compiled from "Proceedings of the Philadelphia academy of sciences [25 Jul. 1882-6 Feb. 1883]" (Amer. nat., Apr. 1883, v. 17, p. 462-466). *B: P. M.* (4058)

Advertisements. (*Psyche*, 1883-1885, v. 4, p. 2, 22, 42, 62, 82, 102, 122, 142, 154, 166, 178, 194, 214, 238, 270, 302, 330.)

For further record, see names of respective advertisers. *B: P. M.* (4059)

American agriculturist. (*Psyche*, 1884-1885, v. 4, p. 194, 214, 238, 270, 302, each 5 cm.)

Advertisement.

B: P. M. (4060)

[**Anal appendages of lepidoptera.**] (*Psyche*, May-June 1883, v. 4, p. 59, 8 cm.)

References to numerous accounts of the discovery of anal appendages in lepidoptera. *B: P. M.* (4061)

Anatomy of macrotoma plumbea. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 354, 13 cm.)

Translation, from *Entom. nachrichten*, Jul. 1885, v. 11, p. 221-222, of abstract of A. Sommer's "Über *macrotoma plumbea*. Beiträge zur anatomie der poduriden" (Zeitschr. für wiss. zool., 1885, v. 41, p. 63-718); histology of egg and of ventral tube; frequent molting of imago; occurrence of parasites; synonymy. *B: P. M.* (4062)

[**Anderson, Joseph, jr.**] Posture of newly emerged butterflies. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 352, 7 cm.)

Notice of Joseph Anderson, jr.'s "Habits of *vanesidae* on emergence" (Entomologist, Sept. 1885, v. 18, p. 241-242), and of other papers by him. *B: P. M.* (4063)

Angus, James. Protective change of color in a spider. (*Psyche*, Jan.-Feb. 1883, v. 4, p. 19-20, 7 cm.)

Reprint from *American naturalist*, Dec. 1882, v. 16, p. 1010; a white spider, placed on a yellow flower, became yellow; capture of insects by such a spider. *B: P. M.* (4064)

Aphis nectar and honey. (*Psyche*, Apr.-June 1885, v. 4, p. 300, 10 cm.)

Reprint of "[Nectar secretion from aphides]" (Science, 23 Jan. 1885, v. 5, p. 82); abundance and quality of nectar secreted by *aphididae*; production of honey from this nectar by *apis mellifica*. *B: P. M.* (4065)

[**Apgar, Austin C.**] [*Naphthalin vs. anthrenus.*] (*Psyche*, Oct.-Dec. 1884, v. 4, p. 234, 5 cm.)

Notice, extracted from *Science*, 21 Nov. 1884, v. 4, Bulletin, p. 5, of communication made by A. C. Apgar, 11 Nov. 1884, to Trenton natural history society; resistance of *anthrenus scrophulariae* to the effects of vapor of naphthalin. *B: P. M.* (4066)

[**Aquatic coleoptera living in poisonous solutions.**] (Amer. nat., Aug. 1883, v. 17, p. 903-904.) (*Psyche*, Jul.-Aug. 1883, v. 4, p. 79, 7 cm.)

Survival of aquatic coleoptera for long periods in aqueous solutions of curare and strychnine. *B: P. M.* (4067)

[**Aubert, —, and Dubois, Raph.**] [*Luminosity of pyrophorus.*] (*Science*, 28 Nov. 1884, v. 4, p. 505.) (*Psyche*, Oct.-Dec. 1884, v. 4, p. 234, 4 cm.)

Notice of Aubert and R. Dubois' "Sur les propriétés de la lumière des pyrophores" (Compt. rend. Acad. sci. [Paris], 15 Sep. 1884, v. 99, p. 477-479); character of spectrum of light emitted by *pyrophorus*. *B: P. M.* (4068)

[**Audolent, P.**] Tenacity of life in *calliphora vomitoria*. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 351, 4 cm.)

Larvae of *calliphora vomitoria* survived for two days under water, and pupated there. *B: P. M.* (4069)

[**Aurivillius, Christopher.**] Lycaenid larvae in ants' nests. (*Psyche*, Apr.-June 1885, v. 4, p. 299-300, 10 cm.)

Notice translated from *Entomologisk tidskrift*, 1884, p. 227, of communication made by C. Aurivillius to Entomologisk förening i Stockholm, 1 Oct. 1884. *B: P. M.* (4070)

Barnard, W: Stebbins. Treatment processes against *phyllloxera vitifoliae*. (*Psyche*, Mch. 1884, v. 3, p. 143-144, 65 cm.)

Remarks upon the efficacy of the nether-insertion process devised by the writer as a means against *phyllloxera vitifoliae* and other subterranean insects, and upon the use of petroleum emulsions, also devised by the writer, as a means against noxious insects in general. *B: P. M.* (4071)

Barrett, C: Golding. Effect of cyanide upon colour. (*Psyche*, Aug.-Sep. 1884, v. 4, p. 204, 9 cm.)

Reprint of author's "Effect of cyanide upon colour" (Entom. mo. mag., June 1884, v. 21, p. 23). *B: P. M.* (4072)

Biological society of Washington. (Psyche, Jan.-Feb. 1884, v. 4, p. 133-134, 39 cm.)

Partial abstract of communications made at meetings of Biological society of Washington, 14 Dec. and 28 Dec. 1883.

B: P. M. (4073)

[**Books** on spiders.] (Science, 23 Mech. 1883, v. 1, p. 207.) (Psyche, Mech.-Apr. 1883, v. 4, p. 39, 2 cm.)

Announcement of forthcoming works on spiders by H. C. McCook.

B: P. M. (4074)

Brauer, Friedrich. The larvæ of *oestríidae*. (Psyche, Jul.-Sep. 1885, v. 4, p. 305-310, 18½ cm.)

Translation, by B: P. Mann, of portion of F. Brauer's "Monographie der oestríidae," Wien, 1863, p. 35-40, treating generally of the structural characters, molts and life-habits of larvæ of *oestríidae*, and of the affinities of the genera.

B: P. M. (4075)

[**Brongniart**, C.] *Fossil thysanura*. (Psyche, Oct.-Dec. 1885, v. 4, p. 353, 15 cm.)

Translation of C. Brongniart's "[*Dasyplectus lucasi*, sp. n. foss.]" (Bull. Soc. entom. France, 1885, Bull. d. séances, p. 101-102); description of fossil *thysanura* (*dasyplectus lucasi*) occurring in the carboniferous schists of Commeny.

B: P. M. (4076)

Bullettino del naturalista collectore. (Psyche, 1884, v. 4, p. 142, 154, 166, 170, 194, each 3 cm.)

Advertisement.

B: P. M. (4077)

Cambridge entomological club. (Psyche, Jan.-Feb. 1883, v. 4, p. 137-141, 59 cm.)

Minutes of annual and monthly meeting of Cambridge entomological club, 12 Jan. 1883, and of monthly meeting, 9 Feb. 1883 [by the secretary (G: Dimmock)]; election of officers for 1883; election of members; arrangements for publication of volume four of PSYCHE; abstract of communications made.

B: P. M. (4078)

Cambridge entomological club. (Psyche, May-June 1883, v. 4, p. 54, 8 cm.)

Minutes of monthly meeting of Cambridge entomological club, 9 March 1883 [by the secretary (G: Dimmock)]; abstract of communications made.

B: P. M. (4079)

Cambridge entomological club. (Psyche, Nov.-Dec. 1883, v. 4, p. 116, 10 cm.)

Minutes of monthly meetings of Cambridge entomological club, 13 Apr. 1883 [by the secretary (G: Dimmock)]; abstract of communications made.

B: P. M. (4080)

Cambridge entomological club. (Psyche, Jan.-Feb. 1884, v. 4, p. 133, 20 cm.)

Minutes of monthly meeting of Cambridge entomological club, 11 May 1883 [by the secretary (G: Dimmock)]; abstract of communications made.

B: P. M. (4081)

Cambridge entomological club. (Psyche, Mech. 1884, v. 4, p. 147, 14 cm.)

Minutes of monthly meeting of Cambridge entomological club, 8 June 1883 [by the secretary (G: Dimmock)]; abstract of communications made.

B: P. M. (4082)

Cambridge entomological club. (Psyche, Apr. 1884, v. 4, p. 160, 27 cm.)

Minutes of monthly meeting of Cambridge entomological club, 12 Oct. and 9 Nov. and in part of monthly meeting, 14 Dec. 1883, by the secretary (G: Dimmock); withdrawal of members; abstract of communications made.

B: P. M. (4083)

Cambridge entomological club. (Psyche, May 1884, v. 4, p. 170, 27 cm.)

Minutes of monthly meeting of Cambridge entomological club, 14 Dec. 1883 (concluded), and in part of annual and monthly meeting, 11 Jan. 1884 [by the secretary (G: Dimmock)]; abstract of communications made; election of officers for 1884; election and withdrawal of members.

B: P. M. (4084)

Cambridge entomological club. (Psyche, Jun.-Jul. 1884, v. 4, p. 186, 34 cm.)

Minutes of annual and monthly meeting of Cambridge entomological club, 11 Jan. 1884 (concluded), and of monthly meeting, 8 Feb. 1884 [by the secretary (G: Dimmock)]; abstract of annual reports for 1883, and of communications made; acceptance and withdrawal of members.

B: P. M. (4085)

Cambridge entomological club. (Psyche, Oct.-Dec. 1884, v. 4, p. 224-226, 70 cm.)

Minutes of monthly meetings of Cambridge entomological club, March-June and Oct.-Dec. 1884 [by the secretary (G: Dimmock)]; withdrawals and death of members; abstract of communications made.

B: P. M. (4086)

Cambridge entomological club. (Psyche, Oct.-Dec. 1885, v. 4, p. 335-338, 116 cm.)

Minutes of annual and monthly meeting of Cambridge entomological club, 5 Jan. 1885, and of monthly meetings, Feb.-June and Oct.-Dec. 1885 [by the secretary (G: Dimmock)]; abstract of secretary's (G: Dimmock) and treasurer's (B: P. Mann) reports for 1884, and of communications made; withdrawal of a member; vote of thanks to S. H. Scudder for the use of the office of Science for club meetings.

B: P. M. (4087)

[**Carbon** disulphide poisonous.] (Psyche, Apr. 1884, v. 4, p. 163, 4 cm.)

Translation, from *Deutsch-amerikanische apotheker-zitung*, 15 Feb. 1884, v. 4, p. 739, of statement that the continued breathing of the vapor of carbon disulphide [CS_2] produces mental derangement.

B: P. M. (4088)

[**Carlet**, Gaston.] [Poison-glands of hymenoptera.] (Amer. nat., Dec. 1884, v. 18, p. 1270.) (Psyche, Oct.-Dec. 1884, v. 4, p. 235, 7 cm.)

Abstract of G. Carlet's "Sur le venin des hyménoptères . . ." (Compt. rend. Acad. sci. [Paris], 23 June 1884, v. 98, p. 1550-1551) [Rec., 3685].

B: P. M. (4089)

[**Caterpillars** in Sweden.] (Nature, 5 Jul. 1883, v. 28, p. 234.) (Psyche, Jul.-Aug. 1883, v. 4, p. 79, 4 cm.)

Occurrence of unknown injurious lepidopterous larva in several parts of Sweden, in 1883.

B: P. M. (4090)

Chambers, Vactor Tousey. The classification of the *Tineidae*. (Psyche, Jul.-Aug. 1883, v. 4, p. 71-74, 109 cm.)

Comments upon remarks made in A: R. Grote's "A brief essay on classification of the heterocera" (Papilio, Feb. 1883, v. 3, p. 35-38); *anaphora* undoubtedly a timeid, even in a restricted sense, but differing more from many so-called tineids in a broad sense than from *Noctuidae*; the so-called *Tineidae* in a broad sense very heterogeneous, and equivalent to the union of many families recognized as distinct; indication of several diverse groups of genera. *B: P. M.* (4091)

Chevrolat's collection of coleoptera. (Psyche, Apr.-June 1885, v. 4, p. 297, 5 cm.)

Notice of offer for sale of A. Chevrolat's collection of coleoptera, and of some prices asked. *B: P. M.* (4092)

Chigoe (The) in Africa. (Amer. nat., June 1883, v. 17, p. 664.) (Psyche, May-June 1883, v. 4, p. 52, 6 cm.)

Palex penetrans stated, in Burton and Cameron's "To the Gold coast for gold," to have been introduced and widely spread recently in western Africa; mention of some of the chief arthropods plagues of that region. *B: P. M.* (4093)

Comstock, J: II: *Coccidae* wanted. (Psyche, v. 4, 1883, p. 2, 22, 42, 62, 82, 102; 1884, p. 122, 142, 154, 166, each 4 cm.) Advertisement. *B: P. M.* (4094)

[**Cook, Albert J:**] [Extra-floral nectar.] (Psyche, Oct.-Dec. 1884, v. 4, p. 234, 4 cm.)

Notice of paper read by A. J. Cook before Natural history society of the Michigan agricultural college, 12 Sep. 1884; contrast of taste of honey made from secretion due to ergot on grass and of that made from secretions of *aphididae*. *B: P. M.* (4095)

Coquillett, Daniel W: Systematic position of the genus *apiocera*. (Psyche, Jan.-Mch. 1883, v. 4, p. 243-244, 49 cm.)

Critical review of C: R. Osten Sacken's "On the genus *apiocera*" (Berliner entom. ztschr., 1883, v. 27, p. 287-294); reasons for placing *apiocera* among the *theridiidae* rather than among the *asilidae*; characters of *asilidae* and *theridiidae* compared; probable variability of *apiocera haruspex*. *R: P. M.* (4096)

Dahl, Friedrich. Habits of spiders. (Psyche, Apr.-June 1885, v. 4, p. 300, 16 cm.)

Extract from partial translation, entitled "Contributions to the biology of spiders" (Ann. and mag. nat. hist., Jan. 1885, s. 5, v. 15, p. 70-72) [Rec., 3826], of author's "Beiträge zur biologie der spinnen" (Zool. anzeiger, 3 Nov. 1884, v. 7, p. 501-505) [Rec., 3825]; notes on the repair of their webs by *Zilla x-notata* and other *araneina*, and on the exhibition of intelligence and instinct by *attus arcuatus*. *R: P. M.* (4097)

Data on annual addresses. (Psyche, Jan.-Mch. 1885, v. 4, p. 265, 9 cm.)

List of annual addresses of retiring presidents of Cambridge entomological club. *B: P. M.* (4098)

Davison, W: Birds nesting in hornets' nests. (Psyche, Oct.-Dec. 1885, v. 4, p. 351, 4 cm.)

Extract from W: Davison's "Birds breeding in ants' nests" (Nature, 12 Mch. 1885, v. 31, p. 455). *B: P. M.* (4099)

[**Davis, W: T.**] [Stridulation of a headless *conocephalus*.] (Science, 7 Nov. 1884, v. 4, p. 448, 4 cm.) (Psyche, Oct.-Dec. 1884, v. 4, p. 235, 6 cm.)

Notice of communication made by W: T. Davis to Natural science association of Staten Island, Oct. 1884. *B: P. M.* (4100)

Dimmock, Anna Katherina. The insects of *betula* in North America. (Psyche, 1885, v. 4: Jan.-Mch., p. 239-243, 142 cm.; Apr.-Jun., p. 271-286, 507 cm.)

List of 107 determined species of insects and of some doubtful ones found on *betula* in North America, with references to the original descriptions and to other important descriptions or accounts of the life-histories of these insects, and with authenticated lists of the other food-plants of the species cited; use of leaves of *betula alba* in rearing polyphagous insects. *B: P. M.* (4101)

Dimmock, Anna Katherina. Sexual attraction in *prionus*. (Psyche, Apr. 1884, v. 4, p. 159, 27 cm.)

Abstract, with remarks [by F. Katter], entitled, "Geschlechtliche anziehung bei coleopteren." (Entom. nachrichten, June 1884, v. 10, p. 183-186.)

Record of observations on the attraction of males of *prionus* by females, and of females by males. *B: P. M.* (4102)

Dimmock, G:, secretary, see CAMBRIDGE entomological club.

Dimmock, G: [*Blissus leucopterus*.] (Psyche, Nov.-Dec. 1883, v. 4, p. 119, 5 cm.)

Notice of J. A. Lintner's Circular no. 1 of the Department of entomology of the New York state museum of natural history, Oct. 1883; occurrence of *blissus leucopterus* in New York and Massachusetts, in 1883. *B: P. M.* (4103)

Dimmock, G: [Book-notice.] (Psyche, May-June 1883, v. 4, p. 53-54, 9 cm.)

Notice of Proceedings of the Davenport academy of natural sciences, v. 3, pt. 3. *B: P. M.* (4104)

Dimmock, G: [Book notice.] (Psyche, May-June 1883, v. 4, p. 54, 3 cm.)

Notice of *Rovaraszti lapok*, a Hungarian entomological journal. *B: P. M.* (4105)

Dimmock, G: [Dollfus prize in insect anatomy.] (Psyche, May 1884, v. 4, p. 175, 7 cm.)

Notice of offer of prizes to subscribers to *Feuille des jeunes naturalistes* for illustrated anatomical work on the larva of a rhopalocerous lepidopteron. [For notice of award of prize, see G: Dimmock's note [of same title] (*op. cit.*, Oct.-Dec. 1884, p. 234-235) (Bec., 4107).] *B: P. M.* (4106)

Dimmock, G: [Dollfus prize in insect anatomy.] (Psyche, Oct.-Dec. 1884, v. 4, p. 234-235, 5 cm.)

Notice of award of prizes offered by A. Dollfus for work on the anatomy of a lepidopterous larva, and of publication of the prize essays in *Feuille des jeunes naturalistes* in 1884. *B: P. M.* (4107)

Dimmock, G: [Index to Ontario entomological reports.] (Psyche, Jul.-Aug. 1883, v. 4, p. 79, 6 cm.)

Crit. rev. of E. B. Reed's "General index to the thirteen annual reports of the Entomological society of the province of Ontario, 1870-1882," Toronto, 1883. *B: P. M.* (4108)

Dimmock, G: [Leuckart as an educator.] (Psyche, Mar. 1884, v. 4, p. 152.)

Notice of biographical sketch of Prof. R. Leuckart by O. P. Kranner in *Deutscher bienenfreund*, Jun. 1884. *B: P. M.* (4109)

[**Dimmock, G:**] Metamorphoses of arctic insects. (Psyche, Jan.-Mar. 1885, v. 4, p. 268, 32 cm.)

Translated extract from C. Anrivillius' "Das insektenleben in arktischen ländern" in A. E. Nordeskiöld's "Studien und forschungen . . . im hohen norden," Lpz., 1885; periods of time requisite for the development of *oenecis borei*, and presumably of *bombus* and other insects in high northern latitudes; absence of parasites of *bombus* in these regions. *B: P. M.* (4110)

Dimmock, G: [Müller-fund.] (Psyche, Jan.-Feb. 1884, v. 4, p. 139-140, 7 cm.)

Statement of plan and object of fund proposed to be raised in honor of Hermann Müller. *B: P. M.* (4111)

Dimmock, G: Necrology. (Psyche, Jan.-Mar. 1885, v. 4, p. 266, 15 cm.)

List of entomologists recently deceased, with dates of birth and death and with characterization of some of them. *B: P. M.* (4112)

Dimmock, G: New text-book of entomology (Psyche, Apr.-June 1885, v. 4, p. 299, 10 cm.)

Prospectus of "An elementary text-book of entomology," to be published in London, with plates by W. F. Kirby. *B: P. M.* (4113)

Dimmock, G: Notice to subscribers. (Psyche, Jan.-Feb. 1883, v. 4, p. 20, 6 cm.)

Notice of delay of completion of publication of volume three of PSYCHE. *B: P. M.* (4114)

Dimmock, G: [Obituary notice of Hermann Müller.] (Psyche, Sep.-Oct. 1883, v. 4, p. 100, 9 cm.)

Reference to number and value of Müller's writings. *B: P. M.* (4115)

Dimmock, G: [Papilio cresphontes in Massachusetts.] (Psyche, Sep.-Oct. 1883, v. 4, p. 99, 5 cm.)

Record of captures of *papilio cresphontes* and of a capture of *junonia coenia* in Massachusetts, in 1883. *B: P. M.* (4116)

Dimmock, G: [Pieris spilleri Spiller.] (Psyche, Apr. 1884, v. 4, p. 163-164, 5 cm.) Reprint. (Sci. record, 15 July 1884, v. 2, p. 210, 6 cm.)

Notice of A. J. Spiller's "Description of a *pieris* new to science, *Pieris spilleri*, mibi" (Entomologist, Mar. 1884, v. 17, p. 62-63), commenting upon author's egotism. *B: P. M.* (4117)

Dimmock, G: Salivary glands in bees. (Psyche, Sep.-Oct. 1883, v. 4, p. 87-89, 72 cm.)

Abstract of P. Schiemenz's "Ueber das herkommen des futtersaftes und die speicheldrüsen der biene". (Zeitschr. f. wissenschaftl. Zool., Feb. 1883, v. 38, p. 71-135) [Rec., 3337.] *B: P. M.* (4118)

Dimmock, G: The scales of coleoptera. (Psyche, 1883, v. 4: Jan.-Feb., p. 3-11, fig. 1-3; Mar.-Apr., p. 23-27, fig. 4-7; May-Jun., p. 43-47, fig. 8-11; Jul.-Aug., p. 63-71.)

Advance abstract, by author, with same title. (Science, 23 March 1883, v. 1, p. 203, 11 cm.)

Abstract, by author, entitled, "Scales of coleoptera." (Science, 1 Feb. 1884, v. 3, p. 127-128, 8 fig., 38 cm.)

History and bibliography 45 titles, of knowledge of scales of insects, particularly of coleoptera; enumeration of orders of insects known to possess scales; special description and illustration of hairs and scales of *cicindela dorsalis*, *anthrenus scrophulariae*, *a. varius*, *hoplia cornuta*, *polyphylla variolosa*, *vulgus squamiger*, *psiloptera drummondi*, *chalcocleptis rubripennis*, *alans ovalatus*, *cladocera* sp. incog., *ptinus tritulus*, *clytus robiniae*, *entimus imperialis*; mention of scales of related species; general summary of families of scaled coleoptera, forms of scales, colorational effects produced by scales (with tabulation of such effects according to families), causes of coloration in scales, structure of scales, and methods of study of the subject. *B: P. M.* (4119)

[**Dipterous** larvae in the human stomach.] (Science, 23 Nov. 1883, v. 2, p. 697, 8 cm.) (Psyche, Nov.-Dec. 1883, v. 4, p. 119, 11 cm.)

Notice of communication made by A. Laboulibéne at meeting of Société entomologique de France. *B: P. M.* (4120)

Dipterous parasite of the rhinoceros. (Psyche, Oct.-Dec. 1883, v. 4, p. 351-352, 6 cm.)

Notice of F. Bräner's "Entomologische beiträge" (Verh. K.-k. zool.-bot. ges. Wien, 1884, v. 34, p. 209-271). *B: P. M.* (4121)

Distant, W: Lucas, London letter. (Psyche, Sep.-Oct. 1883, v. 4, p. 93-94, 41 cm.)

Statistics of species of insects enumerated and figured, and of new species and genera described in Godman and Salvini's "Biologia centrali-americana," prior to July 1883, according to the several sections of the orders treated; notice of studies of F. Leuthner on mandibular polymorphism of *odontolabidae*; list of works appearing on lepidopterous fauna of several countries and list of entomological collections being made in neotropical countries. *B: P. M.* (4122)

Distant, W: Lucas. London letter. *Psyche*. Mch. 1884, v. 4, p. 147-148, 35 cm.)

Notice of a collection of Japanese insects made by G: Lewis, of the intention of G: Semper to publish a work on the *lepidoptera rhopalocera* of the Philippine islands, of the forthcoming of a new edition of R. Trimen's "Rhopalocera Africanae australis," of the occurrence of a succession of mild winters in England and the influence of such winters on the abundance of insects in the ensuing summers, of the pecuniary value of entomological literature in London, and of a collection of insects and other specimens made by E: Whymer in Ecuador; remarks on the sudden and plentiful occurrence of *ragadia crisia* in the Malay peninsula, where it was previously unknown. *B: P. M.* (4123)

Dodge, C: Richards. Townend Glover. *Psyche*, Nov.-Dec. 1883, v. 4, p. 115-116, 43 cm.)

Biographical notice of Townend Glover; description of his unpublished illustrated work on North American entomology. *B: P. M.* (4124)

Dubois, Albert. Preservation of insects. *Psyche*, Jan.-Mch. 1885, v. 4, p. 266, 4 cm.

Translated extract from *Feuille des jeunes naturalistes*. Mch. 1885, v. 15, p. 71; directions for removing verdigris and grease from insects. *B: P. M.* (4125)

Edwards, W: H: On carrying hibernating larvae through the winter. (*Can. entom.*, June 1885, v. 17, p. 113-114.) (*Psyche*, Oct.-Dec. 1885, v. 4, p. 353-354, 17 cm.)

Successful results of artificial hibernation of several larvae of *rhopalocera*. *B: P. M.* (4126)

Election of honorary members. (*Psyche*, Apr.-June 1885, v. 4, p. 297, 4 cm.)

Notice of election of honorary members of Société entomologique de France. *B: P. M.* (4127)

Embryology of the silk-worm. (Amer. nat., Apr. 1883, v. 17, p. 444.) (*Psyche*, Mch.-Apr. 1883, v. 4, p. 39, 4 cm.)

Histology of annion and origin of malpighian vessels of *bombyx mori* studied by S. Salvatico, and rudiments of genital glands of *tinea crinella* observed by Balbiani. *B: P. M.* (4128)

Entomological club of A. A. A. S. (*Psyche*, Jan.-Mch. 1885, v. 4, p. 265, 8 cm.)

Official announcement of meeting of Entomological club of American association for the advancement of science, to be held 25 Aug. 1885, at Ann Arbor, Mich. *B: P. M.* (4129)

Entomological items. (*Psyche*, Jan.-Feb. 1883, v. 4, p. 19-20, 39 cm.) *B: P. M.* (4130)

Entomological items. (*Psyche*, Mch.-Apr. 1883, v. 4, p. 39-40, 44 cm.) *B: P. M.* (4131)

Entomological items. (*Psyche*, May-June 1883, v. 4, p. 59, 34 cm.) *B: P. M.* (4132)

Entomological items. (*Psyche*, Jul.-Aug. 1883, v. 4, p. 79-80, 44 cm.) *B: P. M.* (4133)

Entomological items. (*Psyche*, Sep.-Oct. 1883, v. 4, p. 99-100, 44 cm.) *B: P. M.* (4134)

Entomological items. (*Psyche*, Nov.-Dec. 1883, v. 4, p. 119-120, 45 cm.) *B: P. M.* (4135)

Entomological items. (*Psyche*, Jan.-Feb. 1884, v. 4, p. 139-140, 44 cm.) *B: P. M.* (4136)

Entomological items. (*Psyche*, Mch. 1884, v. 4, p. 151-152, 44 cm.) *B: P. M.* (4137)

Entomological items. (*Psyche*, Apr. 1884, v. 4, p. 163-164, 45 cm.) *B: P. M.* (4138)

Entomological items. (*Psyche*, May 1884, v. 4, p. 175-176, 44 cm.) *B: P. M.* (4139)

Entomological items. (*Psyche*, Jun.-Jul. 1884, v. 4, p. 191-192, 43 cm.) *B: P. M.* (4140)

Entomological items. (*Psyche*, Aug.-Sep. 1884, v. 4, p. 211, 28 cm.) *B: P. M.* (4141)

Entomological items. (*Psyche*, Oct.-Dec. 1884, v. 4, p. 233-236, 133 cm.) *B: P. M.* (4142)

Entomological items. (*Psyche*, Jan.-Mch. 1885, v. 4, p. 265-268, 132 cm.) *B: P. M.* (4143)

Entomological items. (*Psyche*, Apr.-June 1885, v. 4, p. 297-300, 134 cm.) *B: P. M.* (4144)

Entomological items. (*Psyche*, Jul.-Sep. 1885, v. 4, p. 327-328, 64 cm.) *B: P. M.* (4145)

Entomological items. (*Psyche*, Oct-Dec. 1885, v. 4, p. 351-354, 128 cm.) *B: P. M.* (4146)

Entomological society of London. (*Psyche*, Jul.-Aug. 1883, v. 4, p. 75-76, 22 cm.)

Partial abstract (from *Entomologist's monthly magazine*) of reports of business transacted and communications made at meetings of Entomological society of London, 17 Jan.-2 May 1883. *B: P. M.* (4147)

Entomological society of London. (*Psyche*, Apr.-June 1885, v. 4, p. 297, 3 cm.)

Royal charter granted to Entomological society of London, 20 July 1885. *B: P. M.* (4148)

Entomological society of London. (Psyche, Jul.-Sep. 1885, v. 4, p. 311-314, 125 cm.)

Partial abstract (from *Transactions of Entomological society of London*, 1883 and 1884) of communications made at meetings of Entomological society of London, 6 June 1883-3 Sep. 1884. *B: P. M.* (4149)

[**Entomological society of Washington.**] (Psyche, May 1884, v. 4, p. 175, 4 cm.)

List of officers of Entomological society of Washington, for 1884. *B: P. M.* (4150)

Entomology during the year 1883. (Psyche, Apr.-June 1885, v. 4, p. 299, 10 cm.)

Translation of "Entomologie während des Jahres 1883" (Entom. nachrichten, June 1885, v. 11, p. 101). *B: P. M.* (4151)

Fernald, C. H.: *Tortricidae* wanted. (Psyche, 1883, v. 4, p. 2, 22, 42, 62, 82, each 3 cm.)

Advertisement. *B: P. M.* (4152)

[**Final honors in entomology.**] (Psyche, Mich. 1884, v. 4, p. 151, 9 cm.)

Statement, from *The Cornell university register*, 1883-84, p. 111, of conditions under which "final honors" in entomology will be conferred upon graduates of The Cornell university. *B: P. M.* (4153)

Food-habits and vesicating power of cantharis. (Psyche, Apr.-June 1885, v. 4, p. 298, 7 cm.)

Notice of H. Beauregard's "Sur le mode de développement naturel de la cantharide" ("Compt. rend. Acad. sci. [Paris], 8 June 1885, v. 100, p. 1472-1475"). *B: P. M.* (4154)

Forbes, Stephen Alfred. On the life-histories and immature stages of three *eumolpini*. (Psyche, Jan.-Feb. 1884, v. 4, p. 123-130, 272 cm.; pl. 1, with 1 p. expl. of pl.)

Corrective note, by author, with like title . . . "Corrective note." (*op. cit.*, May 1884, p. 167-168, 34 cm.)

Describes larva and pupa of *colaspis brunnea*, *paria atriviria* and *scelodonta nebulosus* (misnamed *s. pubescens*); figures imago of the *paria* and *scelodonta*, pupa of the *scelodonta*, larva of the *colaspis*, head of imago of the *paria*, and larval and pupal characters of the three species; describes and contrasts the life-histories of these species, referring to previous accounts thereof. *B: P. M.* (4155)

Forbes, Stephen Alfred. On the life-histories and immature stages of three *eumolpini* [corr.]. Corrective note. (Psyche, May 1884, v. 4, p. 167-168, 34 cm.)

Corrects and explains erroneous designation of *scelodonta nebulosus* as *s. pubescens* in author's "On the life-histories and immature stages of three *eumolpini*" (*op. cit.*, Jan.-Feb. 1884, p. 123-130) [Rec., 4155]. *B: P. M.* (4156)

Fowler, W. W. Collecting coleoptera. (Psyche, Jan.-Feb. 1883, v. 4, p. 19, 5 cm.)

Extract from *Entomologist*, Oct. 1882, v. 15, p. 231-232; description of a method of collecting coleoptera, of which *staphylinidae*, especially *steenis*, are the commonest, especially in winter. *B: P. M.* (4157)

Friedländer, R. & sohn. [Natural science publications.] (Psyche, 1883-1884, v. 4, p. 102, 122, 142, 154, 166, 178, each 6 cm.)

Advertisement. *B: P. M.* (4158)

Grote as a composer. (Psyche, Apr.-June 1885, v. 4, p. 297, 4 cm.)

Notice of poems, an essay, and a musical composition by A. R. Grote. *B: P. M.* (4159)

Hagen, Hermann August. The first numero of Thomas Say's American entomology and two letters on the hessian fly hitherto not mentioned among his published papers. (Psyche, Mich. 1884, v. 4, p. 145-146, 54 cm.)

Bibliographical note describing T. Say's "American entomology" . . . v. 1, no. 1, Phil., 1877, corresponding to plates 1, 4, 7, 10, 14 and 18 of Say's work of same title, v. 1, Phil., 1821; notice of two publications by Say in *Memoirs of Philadelphia society for promoting agriculture*, 1818, v. 4, p. 221-226 [Rec., 3431], 230-237 [Rec., 3430]. *B: P. M.* (4160)

[**Hagen, Hermann August.**] [Hessian fly so called before the Revolution.] (Psyche, Apr. 1884, v. 4, p. 163, 4 cm.)

Notice of H. A. Hagen's "The occurrence of the hessian fly in North America before the Revolution" (Science, 11 Apr. 1884, v. 3, p. 432). *B: P. M.* (4161)

Hagen, Hermann August. On the relations of fungi to galls and to larvae of *ecidomyia* living in galls. (Psyche, Oct.-Dec. 1885, v. 4, p. 334, 28 cm.)

Reprint, with slight amendment, of H. A. Hagen's paper of same title in *Canadian entomologist*; statement of occurrence of several communities consisting of an insect and a fungus parasitic in a plant gall. *B: P. M.* (4162)

Hagen, Hermann August. The tarsal and antennal characters of *psocidiae*. (Entom. mo. mag., June 1882, v. 19, p. 12-13.) (Psyche, May-June 1883, v. 4, p. 52, 23 cm.)

Young forms of *atropina* have two-jointed tarsi, the apical joint becoming divided in later life, the intermediate joints of the antennae increasing in number by division when the number of tarsal joints increases. *B: P. M.* (4163)

Hazlewood, Francis Tomlinson. Permanent mounting of tracheae of insects. (Psyche, Jan.-Mich. 1885, v. 4, p. 253, 10 cm.)

Description of new method of mounting soft parts of insects permanently for the microscope. *B: P. M.* (4164)

[**Hermaphroditic** lepidoptera.] (*Psyche*, Jul. 1884, v. 4, p. 192, 8 cm.)

Notice of G. Weymer's "Zwei lepidopteren-hermaphroditen von *apatura iris* L. und *nemophila russula* L." (Jahresber. d. Naturw. ver. in Elberfeld, 1884, heft 6, p. 74-77), and of C. Cornelius' "Verzeichniss der Käfer von Elberfeld und dessen Nachbarschaft" . . . (op. cit., p. 1-61). *B: P. M.* (4165)

[**Hinckley**, Mary H.] [Enemies of tadpoles.] (*Psyche*, Oct.-Dec. 1884, v. 4, p. 235, 5 cm.)

Partial notice of M. H. Hinckley's "Notes on the peeping frog . . ." (Mem. Bost. soc. nat. hist., May 1884, v. 3, no. 10); mention of insect and other enemies of larvae of *hydra pickeringii*. *B: P. M.* (4166)

Howard, Leland Ossian. Museum pests of service to the entomologist. (*Psyche*, Jan.-Feb. 1884, v. 4, p. 132, 12 cm.)

Delicate specimens of insects dissected better by *trogoderma larvale* than by the student. *B: P. M.* (4167)

Howard, Leland Ossian. Notice of an omission from Leconte's edition of Thomas Say's writings. (*Psyche*, Aug.-Sep. 1884, v. 4, p. 206, 15 cm.)

Reprint of note by T: Say, from *Journal of the Academy of natural sciences, of Philadelphia*, Aug. 1817, v. 1, p. 63, supplementary to Say's "Some account of the insect known by the name of hessian fly . . ." (Journ. etc., July 1817, v. 1, p. 45-48), and not reprinted in J: L. Leconte's edition of Say's "Complete writings;" comments on Say's erroneous statement that *ceraophon destructor* sheds its wings after breeding; brachypterous individuals occur not uncommonly among *Aeroioninae*. *B: P. M.* (4168)

Howgate, E: The process of skin-casting in a lepidopterous larva. (*Naturalist*, Nov. 1885, p. 366.) (*Psyche*, Jul.-Sep. 1885, v. 4, p. 327, 22 cm.)

Brief description of the manner in which a geometrid larva casts its skin. *B: P. M.* (4169)

Hubbard, H: Guernsey. Notes on the habits of *hypotrichia spissipes* Lec., with description of the females. (*Psyche*, Oct.-Dec. 1884, v. 4, p. 215-217, 78 cm., fig. 13.)

Description of method of flight and diurnal habits of male *hypotrichia spissipes*; description of female imago, with figure of antenna and front tibia and tarsus of male and of female; taxonomic relations of *hypotrichia*, *electrodes* and *fleocoma*. *B: P. M.* (4170)

[**Hudson**, G: Vernon.] Pupal retreat of *charagia virescens*. (*Psyche*, Jan.-Mch. 1885, v. 4, p. 267, 23 cm.)

Extracts from G: V. Hudson's "Life-history of *charagia virescens*" (*Entomologist*, Feb. 1885, v. 18, p. 30-36). *B: P. M.* (4171)

Insects mistaking leaves for flowers. (*Psyche*, Apr.-June 1885, v. 4, p. 298, 9 cm.)

Extract from *Entom. mo. mag.*, May 1885, v. 21, p. 278, of a communication made by R. M. Christy and J: J. Weir to Entomological Society of London, 1 April 1885. *B: P. M.* (4172)

Introduction of humble-bees into New Zealand. (*Psyche*, Apr.-June 1885, v. 4, p. 297, 4 cm.)

After repeated attempts, living *bombus* have been carried from England to New Zealand, to fertilize *trifolium pratense*. *B: P. M.* (4173)

Jack, J: G: A curious habit of *callosamia promethea*. (*Psyche*, May 1884, v. 4, p. 169, 26 cm.)

Observation on the method by which *callosamia promethea* gains access to long-petioled leaves as food. *B: P. M.* (4174)

[**Jones**, E. D.] Drinking habit of a moth. (*Journ. Roy. micros. soc.*, Oct. 1884, s. 2, v. 4, p. 741.) (*Psyche*, Oct.-Dec. 1884, v. 4, p. 217, 16 cm.)

Abstract of a paper by E. D. Jones (Proc. Lit. and phil. soc. Liverpool, 1883, v. 37, p. 76-77); imagos of *Panthera pardalaria* observed to suck up water and pass it through the body in a continuous stream; structural adaptation of the moth to its surroundings. *B: P. M.* (4175)

[**Jordan**, R. C. R.] [Apterous female lepidoptera.] (*Psyche*, Apr. 1884, v. 4, p. 163, 5 cm.)

List, abstracted from R. C. R. Jordan's "On the European species of lepidoptera with apterous or subapterous females" (*Entom. mo. mag.*, Mch. 1884, v. 20, p. 219-221), of European families of lepidoptera containing apterous or subapterous females. *B: P. M.* (4176)

Karsch, Ferdinand Anton Franz. The entomoecidæ. Introduction. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 331-334, 105 cm.)

Transl., by B: P. Mann, of F. A. F. Karsch's "Die entomoecidæ" (*Entom. nachrichten*, Jul. 1884, v. 10, p. 205-209); definition of the nature of galls, lists of orders of animals which produce galls, references to prominent monographs on certain classes of galls, and plan of formation of a comprehensive list of galls of insects. *B: P. M.* (4177)

[**Kent**, W. Saville.] Infusorial parasites of white ants. (*Psyche*, Apr.-June 1885, v. 4, p. 298, 8 cm.)

Notice of communication made by W. S. Kent to Royal society of Tasmania, 17 Nov. 1884, on infusoria found in termitidae. *B: P. M.* (4178)

Krancher, Oskar Paul. Want of symmetry among insects. (*Psyche*, Aug.-Sep. 1884, v. 4, p. 200-203, 91 cm., fig. 12.)

Remarks on the prevalent general symmetry of form and coloration in insects, and the rarity of perfect symmetry or of exact similarity of specimens of one species; remarks on varieties, gynandromorphs and cripples; description and figure of a symmetrical cripple of *aforia crataegi*; description of irregularities in cells of *apis mellifica*. *B: P. M.* (4179)

Krauss, W: Christopher. On the nervous system of the head of the larva of *corydalus cornutus* Linn. Psyche, Jun.-Jul. 1884, v. 4, p. 179-184, 163 cm., pl. 2, with [1 p.] expl. of pl.)

Detailed illustrated description of the anatomy of the nervous system of the head of the larva of *corydalus cornutus*, extracted from a thesis presented to the faculty of the Cornell university for the baccalaureate in science.
B: P. M. (4180)

Landerer, Xaver. [Locusts used as food.] Psyche, Melh., Apr. 1883, v. 4, p. 39, 5 cm.)

Translated extract from *Deutsch-amerikanische apotheker-zeitung*, 1 Melh. 1883. B: P. M. (4181)

Landerer, Xaver. [Manna.] (Psyche, Jun.-Jul. 1884, v. 4, p. 191-192, 8 cm.)

Translated extract from *Deutsch-amerikanische apotheker-zeitung*, 15 May 1882, v. 3, p. 134. B: P. M. (4182)

[**Landerer**, Xaver.] Upon a peculiar oriental locality for honey. (Psyche, Jan.-Melh. 1885, v. 4, p. 266-267, 19 cm.)

Translated extract from X. Landerer's "Mittheilungen aus dem orient" (Deutsch-amer. apotheker-zeitung, 15 Dec. 1882, v. 3, p. 582); an intoxicating, soporific honey obtained in Persia probably from flowers of *papaver*; use of this honey as medicine and otherwise, and use of opium in Persia. B: P. M. (4183)

Lange, C. F. Exchange of European and American coleoptera. (Psyche, Oct.-Dec. 1884, v. 4, p. 233, 3 cm.)

Advertisement. B: P. M. (4184)

[**Leaping ant.**] (Science, 14 Sep. 1883, v. 2, p. 386, 4 cm.) (Psyche, Sep.-Oct. 1883, v. 4, p. 99, 5 cm.)

Notice of communication by E. Lefèvre at meeting of Société entomologique de France, 11 July 1883. B: P. M. (4185)

[**Leconte**, J: Lawrence; obituary notice of.] Psyche, Nov.-Dec. 1883, v. 4, p. 119, 10 cm.)

Obituary notice of J: Lawrence Leconte; explanatory note regarding C. V. Riley's "Tribute to the memory of John Lawrence Leconte" (*hoc op.*, p. 107-110) [Rec., 4263]. B: P. M. (4186)

[**Leidy**, Joseph.] [Habits of *lasius interjectus*.] (Psyche, Jan.-Feb. 1883, v. 4, p. 19, 5 cm.)

Abundance of *lasius interjectus* near Philadelphia, Pa.; care of aphids and coccids by this ant. B: P. M. (4187)

[**Lendenfeld**, R.] [Muscular contraction in flight.] (Science, 19 Dec. 1884, v. 4, p. 562, 2 cm.) (Psyche, Oct.-Dec. 1884, v. 4, p. 234, 4 cm.)

Notice of paper read by Dr. R. Lendenfeld before Linnean society of New South Wales, 29 Oct. 1884; muscular contraction stated to occur in flight of insects. B: P. M. (4188)

Life of Dr. Dzierzon. Psyche, Oct.-Dec. 1885, v. 4, p. 351, 5 cm.)

Notice of a biographical sketch of Johann Dzierzon by O. P. Kranner in *Deutscher bienenfreund*, Jan. 1885. B: P. M. (4189)

Linnean society of London. (Psyche, May-June 1883, v. 4, p. 54, 13 cm.)

Abstract (from *Zoologischer anzeiger*, 5 Melh. 1883, v. 6, p. 127-128) of communication made by J. M. Campbell, at meeting of Linnean society of London, 6 Feb. 1883, on pairing of *tegenaria guyonii*, with description of some glands on the abdominal sexual region of the male of this species. B: P. M. (4190)

Linnean society of London. (Psyche, Sep.-Oct. 1883, v. 4, p. 92-93, 33 cm.)

Partial abstract (from *Zoologischer anzeiger*, of communications made at meetings of Linnean society of London, 15 Feb.-7 June 1883. B: P. M. (4191)

Linnean society of London. (Psyche, Aug.-Sep. 1884, v. 4, p. 206, 11 cm.)

Partial abstract (from *Zoologischer anzeiger*, by J. Murie) of communications made at meetings of Linnean society of London, 20 Dec. 1883 and 17 Jan. 1884. B: P. M. (4192)

Linnean society of London. (Psyche, Jan.-Melh. 1885, v. 4, p. 254, 29 cm.)

Partial abstract (from *Zoologischer anzeiger*, by J. Murie) of communications made at meetings of Linnean society of London, 21 Feb.-20 Nov. 1884. B: P. M. (4193)

Linnean society of New South Wales. (Psyche, Jul.-Aug. 1883, v. 4, p. 76, 9 cm.)

Abstract (from *Zoologischer anzeiger*, 9 Int. 1883, v. 6, p. 376) of communication made by W. Macleay at meeting of Linnean society of New South Wales, 25 Apr. 1883; account of ravages of a tineid moth in vegetable gardens at Sydney, N. S. W.; exhibition (by — Stevens) of chrysalis of *danae* attached to leaf of *pelargonium*. B: P. M. (4194)

Linnean society of New South Wales. (Psyche, Apr.-Jun. 1885, v. 4, p. 287-288, 19 cm.)

Partial abstract (from *Zoologischer anzeiger*) of communications made at meetings of Linnean society of New South Wales, 29 Aug. 1883-31 Dec. 1884. B: P. M. (4195)

Lintner, Joseph Albert. Book notice. Psyche, May-June 1883, v. 4, p. 53, 11 cm.)

Anticipatory notice of W: Saunders' "Insects injurious to fruits," Phil., 1883; need, value and scope of the work. B: P. M. (4196)

Lintner, Joseph Albert. Captures of *feniseca tarquinii* Fabr. (Psyche, Jul.-Aug. 1883, v. 4, p. 75, 14 cm.)

Record of several captures of *feniseca tarquinii* in eastern New York. B: P. M. (4197)

Lintner, Joseph Albert. [Collection of "cut-worms."] (*Psyche*, Jul.-Aug. 1883, v. 4, p. 80, 10 cm.)

Notice of paper read by Mrs. Mary Treat before New Jersey state horticultural society, in January 1883; attraction of cut-worms to *phlox*, and their collection therefrom.
B: P. M. (4108)

Lintner, Joseph Albert. On an egg-parasite of the currant saw-fly, *nematus ventricosus*. (*Psyche*, May-June 1883, v. 4, p. 48-51, 128 cm.)

Observations made in 1863, 1867 and 1868, upon the food-habits and oviposition of *trichogramma pretiosa*, with reprint of comments by Asa Fitch theron (12th ann. rept. ins. N. Y. for 1867) (*Trans. N. Y. state agric. soc.* for 1867, 1868, v. 27), p. 931-932; rediscovery of this parasite in 1882; attempt to scatter specimens over United States and Canada; other occurrences and known hosts of the insect; parasitism of *t. minuta* in eggs of *limenitis disippus*; oviposition of *nematus ventricosus*.
B: P. M. (4199)

Lintner, Joseph Albert. A new sexual character in the pupae of some lepidoptera. (*Psyche*, Nov.-Dec. 1883, v. 4, p. 103-106, 133 cm.)

Mention of primary and secondary sexual characters hitherto observed in insect imagoes and pupae, and presumed characters discovered in pupae of *cossidae* and *aegeridae*.
B: P. M. (4200)

Lintner, Joseph Albert. [*Platygaster* larva parasitic upon galls of *cecidomyia salicis-batatus*.] (*Psyche*, Jul.-Aug. 1883, v. 4, p. 79, 8 cm.)

Notice of Dr. S. Kellicott's account, in *Bulletin of the Buffalo naturalists' field club*, March 1883, of *platygaster* larva parasitic upon galls of *cecidomyia salicis-batatus*.
B: P. M. (4201)

Lintner, Joseph Albert. Rearing lepidoptera. (*Psyche*, May-June 1883, v. 4, p. 53, 14 cm.)

Notice of labors and success of S. L. Elliot in breeding and rearing lepidoptera, and carrying pupae through the winter.
B: P. M. (4202)

[Löw, Franz.] Waxy secretions of psyllid larvae. (*Psyche*, Jul.-Sep. 1885, v. 4, p. 310, 9 cm.)

Translated extract from F. Löw's "Beiträge zur Kenntnis der jingendstadien der psylliden" (Verh. K.-k. zool.-bot. gesells., in Wien, 1884, v. 34) [Rec., 4014].
B: P. M. (4203)

[Looss, —.] New solvent of chitin. (*Psyche*, Apr.-Jun. 1885, v. 4, p. 286, 19 cm.)

Abstract of — Looss' "Neue Lösungsmittel des Chitins" (Zool. anzeiger, 1 June 1885, v. 8, p. 333-334).
B: P. M. (4204)

[Lowne, B.: Thompson.] [Compound vision of insects.] (*Psyche*, Oct.-Dec. 1884, v. 4, p. 235, 9 cm.)

Extract from report by J. Marie, in *Zoologischer anzeiger*, 3 March 1884, v. 7, p. 127, of meeting of Linnean society of London, 7 Feb. 1884. [Author's name given as B. J. Lowne.]
B: P. M. (4205)

Lugger, O. Food-plants of beetles bred in Maryland. (*Psyche*, Aug.-Sep. 1884, v. 4, p. 203-204, 24 cm.)

List of 37 coleoptera and of the trees from the wood (in one case seed) of which they were respectively bred.
B: P. M. (4206)

[Lugger, O.] [Parasites of *tiphia*.] (*Science record*, 15 Aug. 1884, v. 2, p. 232.) (*Psyche*, Aug.-Sep. 1884, v. 4, p. 211, 7 cm.)

Crit. rev., by C. V. Riley, entitled "Parasites of the larva of *tachnostenus fusca*." (*Psyche*, Oct.-Dec. 1884, v. 4, p. 224, 9 cm.)

Hymenopterous parasites occurring in cocoons of *tiphia*, the larvae of the *tiphia* being infested by larvae of *rhipiphorus pectinatus* or *r. limbatus* and being themselves parasitic on larvae of *tachnostenus fusca*; the first mentioned parasites supposed to prey upon the *rhipiphorus*.
B: P. M. (4207)

[Macleay, W.] [Helix-like egg-cases.] (*Psyche*, Oct.-Dec. 1884, v. 4, p. 235, 4 cm.)

Notice of communication made by W. Macleay to Linnean society of New South Wales, June 1884.
B: P. M. (4208)

Macloskie, G: Gills of insect-larvae. (*Psyche*, Nov.-Dec. 1883, v. 4, p. 110-112, 68 cm.)

Nature of gills of insect-larvae defined; contrary to the view usually held regarding them, the tracheae therein terminate caecally and not in recurrent loops; action of tracheae tidal.
B: P. M. (4209)

Macloskie, G: Head of larval *musca*: preliminary note. (*Psyche*, Oct.-Dec. 1884, v. 4, p. 218-219, 44 cm.)

Description of structure of head in larva of *musca caesar*, homologizing the several parts with those of imago.
B: P. M. (4210)

[Maeklin, F. W:] Obituary notice of.] (*Psyche*, Mar.-Apr. 1883, v. 4, p. 39, 6 cm.)

Extract from *American naturalist*, Apr. 1883, v. 17, p. 424.
B: P. M. (4211)

Mann, B: Pickman, treasurer. Acknowledgement of contributions. (*Psyche*, Aug.-Sep. 1884, v. 4, p. 211-212, 39 cm.)
B: P. M. (4212)

Mann, B: Pickman, treasurer. Acknowledgments. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 330, 7 cm.)

Acknowledgment of contributions to permanent publication fund of PSYCHE.
B: P. M. (4213)

Mann, B: Pickman, ed. Bibliographical record. (*Psyche*, 1883-1885, v. 4, p. 15-18, 33-38, 55-58, 77-78, 95-98, 117-118, 135-138, 149-150, 161-162, 171-174, 187-190, 207-210, 227-232, 255-264, 289-296, 315-326, 339-350, 350*-350**.)

List of publications on entomology, being no. 3101-4300 of the Bibliographical record of PSYCHE, containing exact titles of and references to and brief analyses of each publication recorded, with occasional explanations of the method of record.
B: P. M. (4214)

Mann, B: Pickman. The bibliography of entomology. Annual address of the retiring president of the Cambridge entomological club, 11 January 1884. (*Psyche*, Apr. 1884, v. 4, p. 155-159, 135 cm.)

7th annual address of retiring president of Cambridge entomological club; remarks upon the interest of the club in bibliographical work, upon the importance of bibliography, upon the scope of existing periodicals of zoological bibliography, upon the value of H. A. Hagen's "Bibliotheca entomologica" [Rec., 3309], and upon the Bibliographical record of PSYCHE. *B: P. M.* (4215)

Mann, B: Pickman. [Biographical notice of W. C. Krauss.] (*Psyche*, Jun.-Jul. 1884, v. 4, p. 191, 7 cm.)

Notice of graduation of W. Christopher Krauss from The Cornell university, 19 June 1884; extension of welcome to philosophical entomologists. *B: P. M.* (4216)

Mann, B: Pickman. Close of volume four. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 335, 11 cm.)

Valedictory address of B: P. Mann as managing editor of PSYCHE; explanation of the scope of the systematic and alphabetic indices of volume four. *B: P. M.* (4217)

Mann, B: Pickman. Contribution to the knowledge of parasitic life in galls. (*Psyche*, Sep.-Oct. 1883, v. 4, p. 89-91, 88 cm.)

Engl. transl. of G. F. Möller's "Bidrag till kännedomen om parasitiflvet i galläpplen" . . . Entom. tidskr., 1882, v. 3, p. 182-186 [Rec., 3397]; lists of insects other than the gall-makers raised from galls of several species of cynipidae in Sweden. *B: P. M.* (4218)

Mann, B: Pickman, *transl.* The double role of the sting of the honey-bee. (*Psyche*, Jan.-Mch. 1885, v. 4, p. 251-252, 66 cm.)

Translation, by B: P. Mann, of "Über eine doppelrolle des stachels der honigbiene" (Deutsch-amer. apotheker-zeitung, 15 Jan. 1885, v. 5, p. 664) [Rec., 3722]. *B: P. M.* (4219)

Mann, B: Pickman, *secretary.* [Entomological society of Washington.] (*Psyche*, Mch. 1884, v. 4, p. 151, 5 cm.).

Notice of preliminary organization of Entomological society of Washington, 29 Feb. 1884. *B: P. M.* (4220)

Mann, B: Pickman. *Endamus titinus* flying at night. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 352, 10 cm.)

Communication made to Cambridge entomological club, 11 Dec. 1885; behavior of *endamus titinus* attracted to artificial light at night. *B: P. M.* (4221)

Mann, B: Pickman. False dates. (*Psyche*, Mch.-Apr. 1883, v. 4, p. 31-32, 45 cm.)

Comments on the value of a systematic statement of dates of issue of scientific periodicals, and the falsity as well as unreliability of such statements when made in connection with the issues dated; thesis illustrated by a table of announced and actual dates of issue of volumes 20 and 21 of *Proceedings of Boston society of natural history*. *B: P. M.* (4222)

Mann, B: Pickman. Food-plants of *pulvinaria innumerabilis*. (*Psyche*, Oct.-Dec. 1884, v. 4, p. 224, 20 cm.)

List of food-plants of *pulvinaria innumerabilis*, compiled from various authorities; type specimens deposited in Museum of comparative zoology, Cambridge, Mass. *B: P. M.* (4223)

Mann, B: Pickman. Francis Gregory Sanborn. (*Psyche*, Aug.-Sep. 1884, v. 4, p. 205, 26 cm.)

Obituary notice of Francis Gregory Sanborn. *B: P. M.* (4224)

Mann, B: Pickman. Herbert Knowles Morrison. (*Psyche*, Apr.-Jun. 1885, v. 4, p. 287, 22 cm.)

Obituary notice of H. K. Morrison. *B: P. M.* (4225)

Mann, B: Pickman. Index to entomological literature. (*Psyche*, 1884-1885, v. 4, p. 214, 238, 270, 302, each 4 cm.)

Advertisement. *B: P. M.* (4226)

Mann, B: Pickman. Index to entomological literature. (*Psyche*, Oct.-Dec. 1884, v. 4, p. 223, 27 cm.)

Remarks upon the economy of a division of labor by which special students may be spared the necessity of searching through miscellaneous literature for writings upon their specialties; statement of plan for such division of labor; solicitation of contribution of special reference lists to the pages of PSYCHE. *B: P. M.* (4227)

Mann, B: Pickman. The influence of meteorological conditions on insect life. (*Psyche*, Sep.-Oct. 1883, v. 4, p. 83-87, 146 cm.)

Abstract of C: G. Barrett's paper of same title (Entom. mo. mag., June 1882, v. 19, p. 1-8) [Rec., 3889]; effect of severely cold winters in promoting the abundance of certain species of lepidoptera, and of wet weather in destroying other species. *B: P. M.* (4228)

Mann, B: Pickman and Dimmock, G: Introduction to the fourth volume. (*Psyche*, Jan.-Feb. 1883, v. 4, p. 12-13, 36 cm.)

Statement of the material and editorial conditions under which the publication of the fourth volume of PSYCHE is inaugurated. *B: P. M.* (4229)

Mann, B: Pickman. [References to galls and gall-insects.] (*Psyche*, Mch. 1884, v. 4, p. 147, 6 cm.)

Notice of publication in Bibliographical record of PSYCHE, of references to galls and gall-insects, and of reservation of references not ready for publication; offer to supply manuscript references in exchange for equivalent returns. *B: P. M.* (4230)

Mann, B: Pickman. Review. (*Psyche*, Jun.-Jul. 1884, v. 4, p. 185, 28 cm.)

Critical notice of J: H: Comstock's "(A fragment of a) Guide to practical work in elementary entomology" [Rec., 3508]; comments on the peculiar terms of anatomical description used in the work. *B: P. M.* (4231)

Mann, B: Pickman. Vactor Tousey Chambers. (Psyche, Sep.-Oct. 1883, v. 4, p. 94, 15 cm.)

Biographical notice of Vactor Tousey Chambers; list of his entomological writings recorded in PSYCHE. *B: P. M.* (4232)

Mann's reference indexes. (Psyche, Oct.-Dec. 1885, v. 4, p. 330, 2 cm.)

Advertisement. *B: P. M.* (4233)

[**Medicinal** use of *blatta orientalis*.] (Psyche, Nov.-Dec. 1883, v. 4, p. 119-120, 11 cm.)

Extract from abstract (in *Deutsch-amerikanische apothekerzeitung*, 1 Apr. 1883, v. 4, p. 49) of paper by T. Bogomolow (in *St. Petersburg medicinische wochenschrift*). *B: P. M.* (4234)

Müller, Fritz. Butterflies as botanists. (Nature, 10 Jul. 1884, v. 30, p. 240.) (Psyche, June-Jul. 1884, v. 4, p. 191, 7 cm.)

The use of certain plants as food by lepidoptera revealed an appreciation of the true relationship of the genera before the same was recognized by authors. *B: P. M.* (4235)

[**Müller**, Hermann: memoir of.] (Amer. nat., Aug. 1884, v. 18, p. 848.) (Psyche, Aug.-Sep. 1884, v. 4, p. 211, 3 cm.)

Notice of publication, by Ernst Krause, of memoir with portrait and list of writings of Hermann Müller. *B: P. M.* (4236)

Munn & co. Patents. (Psyche, 1883-1885, v. 4, p. 102, 122, 142, 154, 166, 178, 194, each 4 cm.; p. 302, 9 cm.)

Advertisements. *B: P. M.* (4237)

Munn & co. Scientific american. (Psyche, 1884-1885, v. 4, p. 214, 238, 270, each 8 cm.) Advertisement. *B: P. M.* (4238)

Murtfeldt, Mary Esther. A butterfly attracted by lamp-light. (Psyche, Aug.-Sep. 1884, v. 4, p. 206, 7 cm.)

Narration of two instances of the attraction of *apatura lycaon* by lamp-light at night. *B: P. M.* (4239)

Murtfeldt, Mary Esther. Sexual characters in the chrysalids of *grapta interrogationis*. (Psyche, Jun.-Jul. 1884, v. 4, p. 184, 17 cm.)

Statement that pale and gilded chrysalids of *grapta interrogationis* yielded female imagoes, while males were obtained from darker colored chrysalids without brilliant ornamentation. *B: P. M.* (4240)

[**Necrology**.] (Psyche, Jun.-Jul. 1884, v. 4, p. 191, 4 cm.)

Obituary notices of J. C. Schiödte, Edwin Birchall and W. Prest. *B: P. M.* (4241)

[**Necrology**.] (Psyche, Oct.-Dec. 1884, v. 4, p. 236, 13 cm.)

List of entomologists recently deceased, with dates of the birth and death and with characterization of some of them. *B: P. M.* (4242)

[**New** scientific journals.] (Psyche, Mech. 1884, v. 4, p. 151, 13 cm.)

Notice of several ephemeral scientific periodicals recently begun, and condemnation of the waste of effort involved in such publications. *B: P. M.* (4243)

Notices to entomologists. (Psyche, May-June 1883, v. 4, p. 60, 10 cm.)

Call, by J. A. Lintner, of a meeting of entomologists to be held at Minneapolis, Minn., 15 Aug. 1883; and by B: P. Mann and G: Dimmock, of a special public meeting of Cambridge entomological club to be held at the same place, 14 Aug. 1883. *B: P. M.* (4244)

[**Ord**, W: M.] Erosion of glass. (Psyche, Oct.-Dec. 1885, v. 4, p. 352, 8 cm.)

Abstract of W: M. Ord's "Erosion of glass" (Nature, 19 Feb. 1885, v. 31, p. 300); chemical explanation of erosion of glass by "imud" formed by *termitina*. *B: P. M.* (4245)

Osborne, J: A. [Position of embryo in eggs of insects.] (Psyche, May 1884, v. 4, p. 175-176, 9 cm.)

Extract from J: A. Osborne's "Some further observations on the parthenogenesis of *zaraea fasciata*" . . . (Entom. mo. mag., Dec. 1883, v. 20, p. 145-148). *B: P. M.* (4246)

Parasitic [corr.] nematods. (Psyche, Oct.-Dec. 1885, v. 4, p. 352-353, 10 cm.)

Notice of communication made by H. Gadeau de Kerville to Société entomologique de France, 9 Sep. 1885, and of O' Linstow's "Compendium der helminthologie" . . . Hannover, 1878 [Rec., 3119]. *B: P. M.* (4247)

[**Passerini**, Napoleone.] Observations on decapitated silkworm moths. (Psyche, Apr.-Jun. 1885, v. 4, p. 288, 17 cm.)

Abstract of N. Passerini's "Esperienze sulla decapitazione delle farfalle del baco da seta" (Bull. Soc. entom. ital., 31 Dec. 1884, v. 10, p. 255-280). *B: P. M.* (4248)

Patton, W: Hampton. Sound-producing organs in *anomala*, *anthonomus*, and other coleoptera. (Psyche, Mech. 1884, v. 4, p. 146, 15 cm.)

Statement of occurrence of stridulating organs in several *scarabaeidae* and *elateridae* and in *curculionidae*; description of location of these organs. *B: P. M.* (4249)

[**Phylloxera** in Silesia.] (Science, 21 Nov. 1884, v. 4, p. 481, 2 cm.) (Psyche, Oct.-Dec. 1884, v. 4, p. 233, 2 cm.)

Notice of appearance of *phylloxera vitifoliae* in Proskau, Silesia. *B: P. M.* (4250)

[**Phylloxera** precautions at Argentine custom-house.] (Psyche, Jan.-Feb. 1884, v. 4, p. 139, 4 cm.)

Notice, translated from *El nacional*, 8 Sep. 1883, p. 1, col. 8, of prohibition of importation of grape-vines at Buenos Aires, to avoid danger of introduction of *phylloxera vitifoliae*. *B: P. M.* (4251)

Phytophagous carabidae.] *Psyche*, Oct.-Dec. 1884, v. 4, p. 234, 4 cm.)

Notice of communications by A. C. Horner and T. H. Hart, in *Entomologist*, Oct. and Nov. 1884.
B: P. M. (4252)

[Foujade, Gustave Arthur.] [Predominance of genital functions.] (*Psyche*, Oct.-Dec. 1884, v. 4, p. 236, 11 cm.)

Translation of communication made by G. A. Foujade to Société entomologique de France, 23 July 1884; movements of genital organs in *brepilos*, *rhabdocera rhamni* and *lucanus cervus* observed after these insects were otherwise dead.
B: P. M. (4253)

[Practical naturalist (The).] (*Psyche*, Nov.-Dec. 1883, v. 4, p. 116, 6 cm.)

Notice of *Practical naturalist*, no. 1-7, published by Ward and Riley at Bradford, England.
B: P. M. (4254)

[Preparation of duplicate coleoptera.] (*Psyche*, Jan.-Feb. 1884, v. 4, p. 140, 6 cm.)

Reprint from *Science record*, Nov. 1883, v. 2, p. 15-16; recipe for a solution, such as that used by J. B. Smith, in which to soak certain insects to render them not liable to break.
B: P. M. (4255)

Preservation of honey. (*Sci. Amer.*, 18 Nov. 1882, [v. 61], n. s., v. 47, p. 324.)

(*Psyche*, Jan.-Feb. 1883, v. 4, p. 19, 4 cm.)

Presence of formic acid in crude honey, and effect of this acid in preventing fermentation.
B: P. M. (4256)

Preservation of insects. (*Psyche*, April-June 1885, v. 4, p. 298, 8 cm.)

Translation of a paper in *Feuille des jennes naturalistes*, Apr. 1885, v. 15, p. 81; method of use of solution of naphthalin in benzoin to prepare hairless insects for the cabinet (by — Jacobs); verdigris removed from pins by ammonia (by C: Zuber).
B: P. M. (4257)

Prize work on tactile organs. (*Psyche*, Oct.-Dec. 1885, v. 4, p. 351, 2 cm.)

Notice of grant, by Académie des sciences de France, to J. Chatin, of grand prize for a work on tactile organs of insects and crustacea.
B: P. M. (4258)

Proceedings of societies. (*Psyche*, 1883-1885, v. 4, p. 13-14, 32, 54, 75-76, 92-93, 116, 133-134, 147, 160, 170, 186, 206, 224-226, 253-254, 287-288, 311-314, 335-338.)

For further record, see names of respective societies.
B: P. M. (4259)

Pronostications of weather by insects. (*Psyche*, Jul.-Sep. 1885, v. 4, p. 327-328, 41 cm.)

Notice, extracted from "[Bees as storm-warners]" (*Nature*, 23 Apr. 1885, v. 31, p. 587), of article by — Emmerig (*Natur*, 1885, no. 17), on the behavior of *apis mellifica* as indicative of the approach of thunderstorms; extracts from and references to other articles on the subject.
B: P. M. (4260)

Riley, C: Valentine. Galls and gall insects. (*Psyche*, 1883, v. 4, p. 2, 22, 42, 62, 82, each 3 cm.)

Advertisement. B: P. M. (4261)

Riley, C: Valentine. Parasites of the larva of *lachnostenus fusca*. (*Psyche*, Oct.-Dec. 1884, v. 4, p. 224, 9 cm.)

Crit. rev. of [O: Lügger's "Parasites of *tiphia*"] (*Psyche*, Aug.-Sep. 1884, v. 4, p. 211) [*Rec.* 425]; *tiphia* larvae externally parasitic on larvae of *lachnostenus fusca*, beginning to feed as soon as hatched; eggs of *riphiphorus* probably laid on flowers frequented by *tiphia*, the triungulin attaching themselves to the *tiphia* and carried by it to the nest.
B: P. M. (4262)

Riley, C: Valentine. Tribute to the memory of John Lawrence Leconte. (*Psyche*, Nov.-Dec. 1883, v. 4, p. 107-110.)

Separate. [Cambridge, Mass., Feb. 1884.] n. t.-p., p. 107-110, 25 X 18.

Notice. (*Psyche*, *ut cit.*, p. 119.)

Germ. tr. [by F. Katter], entitled, "Zum gedächtniss von John Lawrence Leconte." (*Entom. nachrichten*, June 1884, Jahrg. 10, p. 183-186.)

Biographical notice of J. L. Leconte; amount, character and importance of Leconte's work and writings; his personal character; his relations with G: H: Horn; disposition of his entomological collection.
B: P. M. (4263)

Ross, M. Louisa.] South American insects for sale. (*Psyche*, Jan.-Mch. 1885, v. 4, p. 263, 5 cm.)

Advertisement. B: P. M. (4264)

R[ye], E: Caldwell. Influence of color on insects. (*Psyche*, Nov.-Dec. 1883, v. 4, p. 114, 16 cm.)

Extract from E. F. imThurn's account (*Timehri*, v. 4, pt. 2, p. 223) of a visit to Mt. Russell in Guiana; yellow butterflies attracted to yellow flowers, and blue *morpho* to decaying banana-skins, but red species not attracted to red fruit; butterflies entrapped under a basket.
B: P. M. (4265)

Saunders, Sidney Smith: obituary notice of] (*Nature*, 17 Apr. 1884, v. 29, p. 581.) (*Psyche*, May 1884, v. 4, p. 175, 4 cm.)

Sir Sidney Smith Saunders, entomologist, b. June 1809, d. 15 April 1884; especial student of *syllophidae*.
B: P. M. (4266)

Schulgin, M.: [Imbedding material.] (*Psyche*, Jan.-Feb. 1883, v. 4, p. 19, 3 cm.)

Notice of M. Schulgin's "Zur technik der histologie" (*Zool. anzeiger*, 8 Jan. 1883, v. 6, p. 21-22).
B: P. M. (4267)

Scudder, S. Hubbard. Early stages of butterflies wanted. (*Psyche*, 1883, v. 4, p. 2, 22, 42, 62, 82, 102, each 4 cm.)

Advertisement; same as Rec., 3085. B: P. M. (4268)